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Evaluating Environmental Conflict Resolution and Collaborative Problem Solving Processes

February 2005

Presentation Outline

I.   The collaborative design and evolution of the Multi-Agency Evaluation Initiative.

II. Overview of the evaluation system design.

III. Preliminary findings from Phase I of the Multi-Agency Evaluation Study.

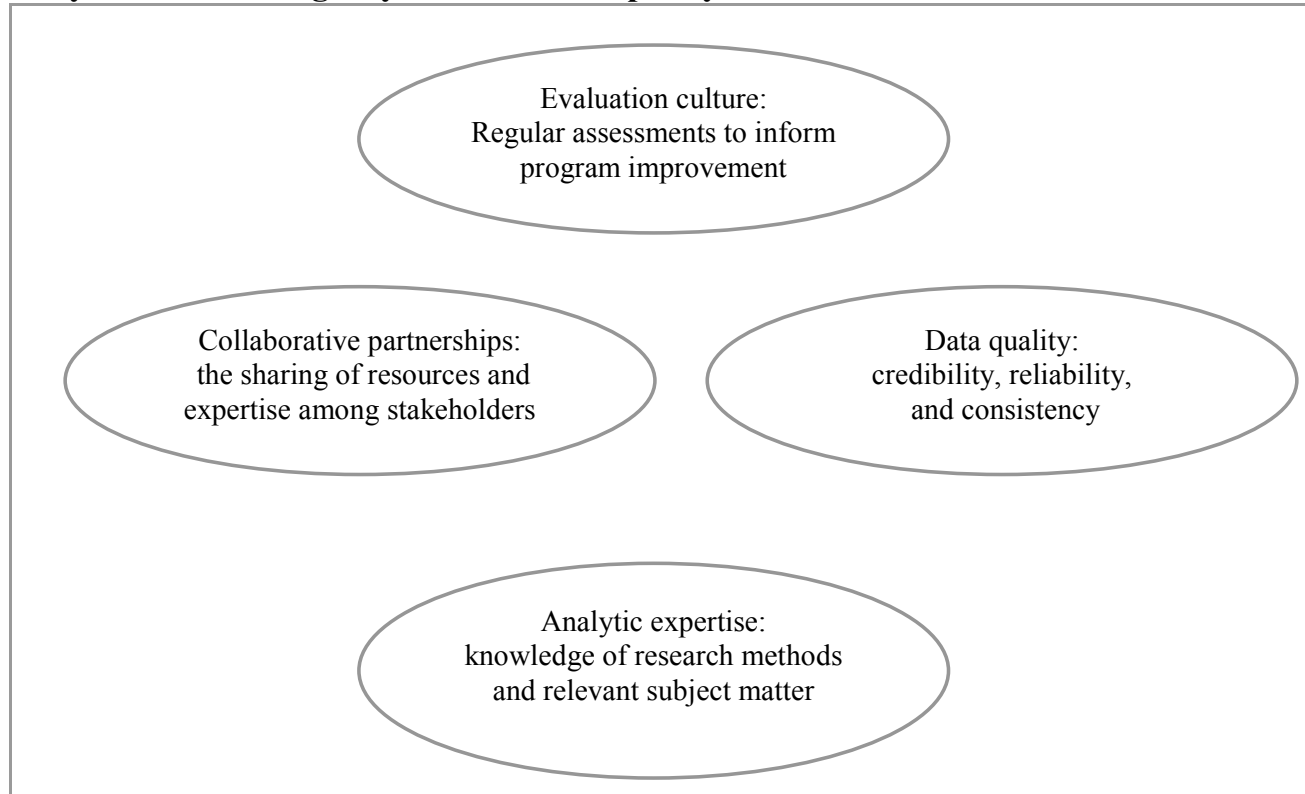IV. Next steps – Launching Phase II of the Multi-Agency Evaluation Study.

ECR Evaluation:
Evolution, Purpose and Design

The Collaborative Evolution of the Evaluation System

1999 "Tumamoc Hill Meeting" to brainstorm ideas re: evaluating collaborative processes.

2000 Initial *Program Evaluation Collaborative* (USIECR, PCI, MODR, and ODRC).

2002 *Collaborative* expanded under PCI to include additional state programs and under USIECR to include federal programs.

2003 Multi-Agency Evaluation Study *(MAES)* – performance analyzed using pooled case evaluation data from 4 federal and 2 state programs.

2004 *MAES* holds 2-day meeting of researchers, program mangers and practitioners to review initial results, and to discuss next steps.

2005 Second round of *MAES* - Expand the network of data contributors. Use findings to help strengthen state and federal programs and institutionalize evaluation in programs.

Key Elements of Agency Evaluation Capacity

Key Elements of Agency Evaluation Capacity

Evaluation culture:
Regular assessments to inform
program improvement

Collaborative partnerships:
the sharing of resources and
expertise among stakeholders

Data quality:
credibility, reliability,
and consistency

Analytic expertise:
knowledge of research methods
and relevant subject matter

Source: GAO.

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The Goals of the Evaluation System and of the Multi-Agency Initiative

Measure and **report on performance** (i.e., the effectiveness of collaborative processes),

Determine **what factors affect performance** (i.e., the achievement of desired process and agreement outcomes and project impacts), and
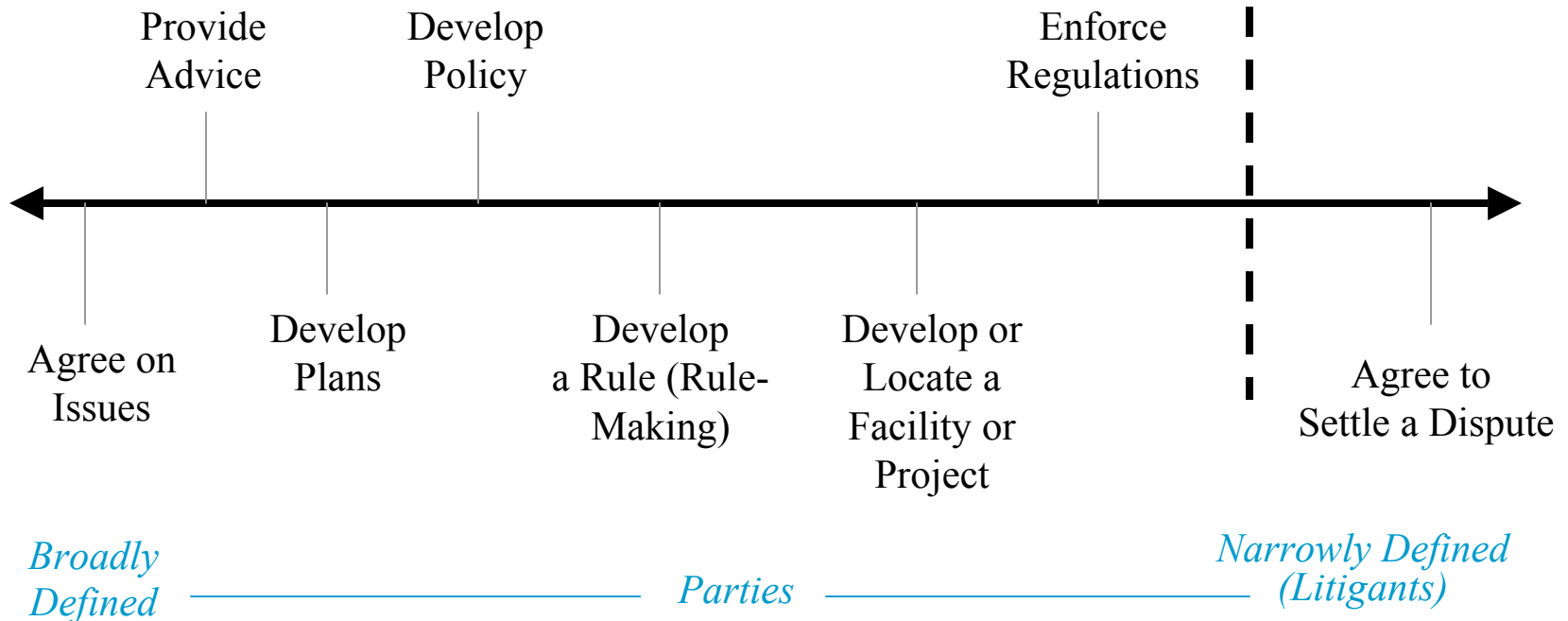
Create "usable knowledge" to facilitate **continual learning and improvement**.

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Environmental Conflict Resolution and Collaborative Problem Solving Processes

Environmental conflict resolution and collaborative problem solving processes include assisted multi-party negotiations in the context of environmental, public lands, or natural resources issues or conflicts, including matters related to energy, transportation, and land use. These processes differ from conventional agency decision making by engaging affected interests and agency decision makers more directly in collaborative problem solving. Assistance from impartial third parties (whether internal or external facilitators or mediators) adds value when addressing complex, high conflict or low trust settings. The collaborative processes can be applied at the beginning of a policy development or planning process, or in the context of rulemaking, administrative decision making, enforcement, or litigation and can include conflicting interests between federal, state, local, tribal and industry parties where a federal agency has ultimate responsibility for decision-making. The guiding principles are derived from professional experience and research in interest-based bargaining, alternative dispute resolution and environmental mediation, consensus building, and collaborative management.

Designing Instruments Applicable to the Spectrum of Collaborative Processes

Upstream (All agreement-seeking processes with mediator/facilitator assistance) Downstream

Provide Advice

Develop Policy

Enforce Regulations

Agree on Issues

Develop Plans

Develop a Rule (Rule-Making)

Develop or Locate a Facility or Project

Agree to Settle a Dispute

Broadly Defined — *Parties* — *Narrowly Defined (Litigants)*

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The Evaluation Design Process

The Evaluation Model (Conceptual Model)

Desired Process Conditions

Expected Process Dynamics

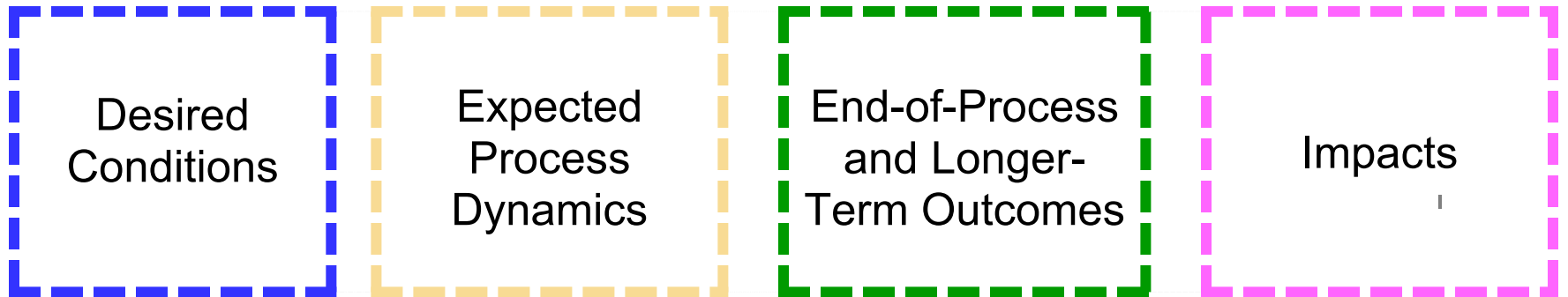**End of Process and Longer-Term Outcomes**

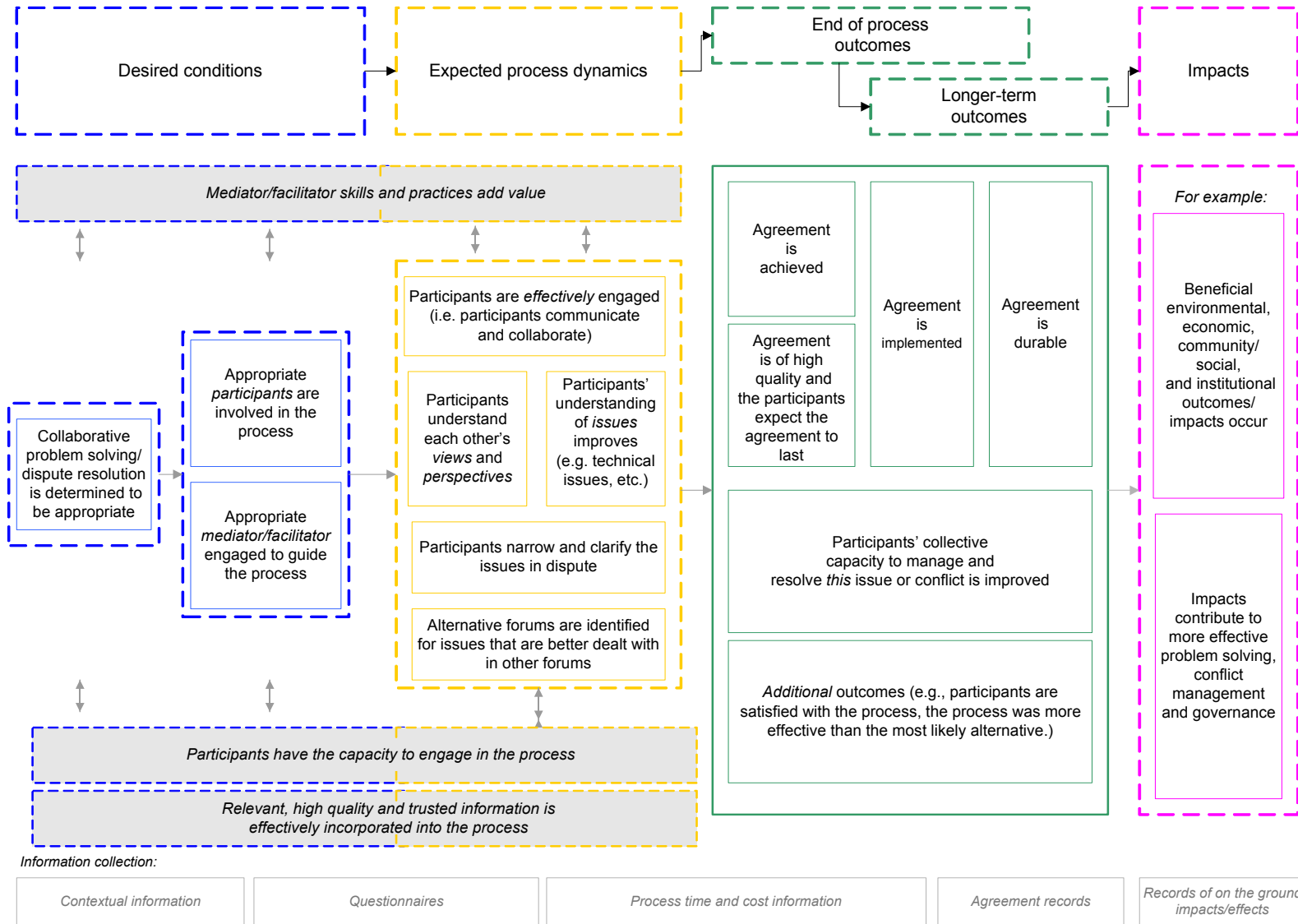**Impacts**

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The Four Major Components of the Evaluation Model

Desired Conditions

Expected Process Dynamics

End-of-Process and Longer-Term Outcomes

Impacts

Environmental Conflict Resolution and Collaborative Problem Solving Evaluation Model

| Desired conditions | → | Expected process dynamics | End of process outcomes | | Impacts |

Mediator/facilitator skills and practices add value

Collaborative problem solving/ dispute resolution is determined to be appropriate

Appropriate *participants* are involved in the process

Appropriate *mediator/facilitator* engaged to guide the process

Participants are *effectively* engaged (i.e. participants communicate and collaborate)

Participants understand each other's *views* and *perspectives*

Participants' understanding of *issues* improves (e.g. technical issues, etc.)

Participants narrow and clarify the issues in dispute

Alternative forums are identified for issues that are better dealt with in other forums

Agreement is achieved

Agreement is of high quality and the participants expect the agreement to last

Agreement is implemented

Agreement is durable

Participants' collective capacity to manage and resolve *this* issue or conflict is improved

Additional outcomes (e.g., participants are satisfied with the process, the process was more effective than the most likely alternative.)

For example:

Beneficial environmental, economic, community/ social, and institutional outcomes/ impacts occur

Impacts contribute to more effective problem solving, conflict management and governance

Participants have the capacity to engage in the process

Relevant, high quality and trusted information is effectively incorporated into the process

Information collection:

| *Contextual information* | *Questionnaires* | *Process time and cost information* | *Agreement records* | *Records of on the ground impacts/effects* |

The Evaluation Model

Model Construct: A Detailed Example

Expected Process Dynamic

Participants are effectively engaged (i.e., participants communicate and collaborate)

Evaluation Questions	Respondent Type
The participants continued to be engaged so long as their involvement was necessary.	
The participants worked together cooperatively on the key issues in this case or project.	
The participants sought options or solutions that met the common needs of all participants.	*Participants*
Trust was built among the participants.	
Some participants were not fully engaged in the collaborative process.	
Some participants did not keep their members/constituents informed during the process.	*Mediator/ Facilitator*
Some participants did not treat other participants with respect.	
Some of the participants did not follow the ground rules.	

Design Considerations:
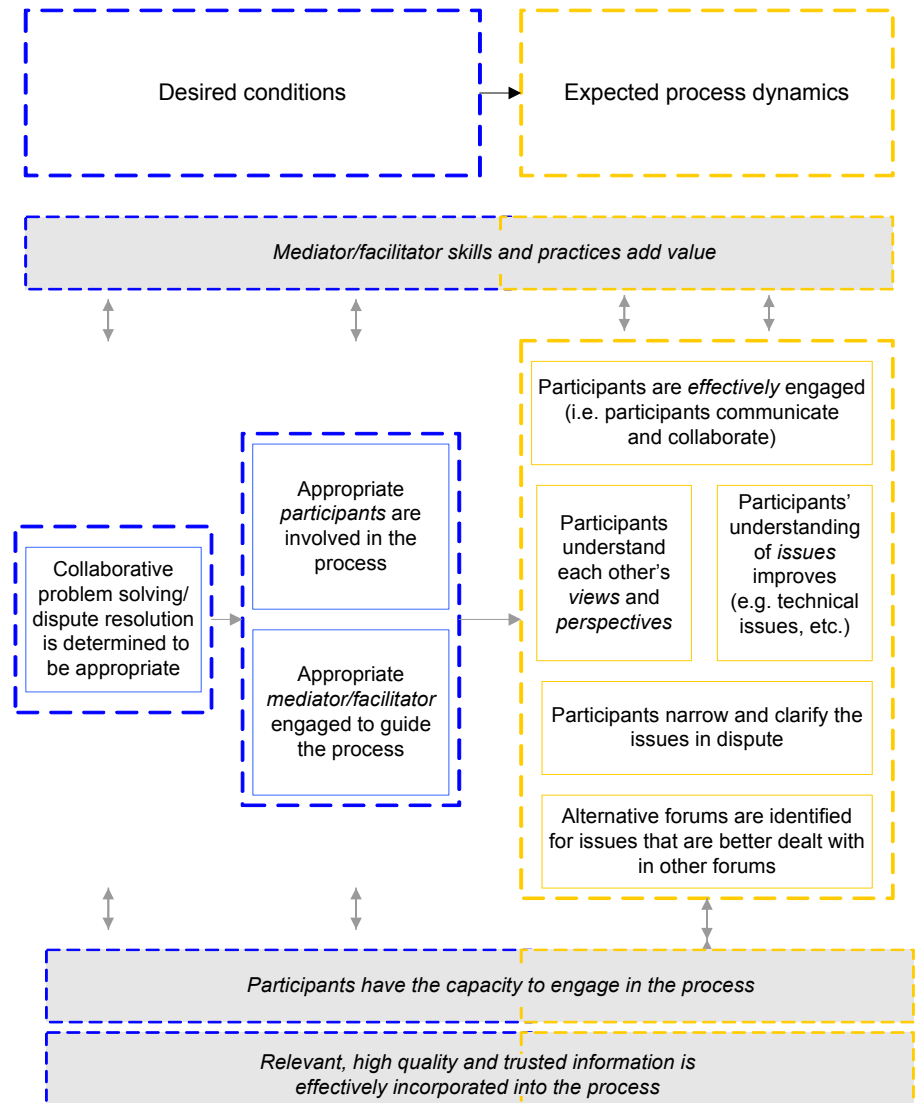# Criteria Identified in the Literature

Over **100 evaluation criteria** (critical variables) were identified from the literature on environmental conflict resolution.

The identified criteria were used to help **inform our design process.**

The criteria provide a **vantage point** from which to consider the attributes of the U.S. Institute's evaluation model and can be used to identify criteria for other research initiatives.

The literature review was conducted by Dr. Julie Macfarlane, University of Windsor and Dr. Bernard Mayer, CDR Associates on behalf of the U.S. Institute with the financial support of the William and Flora Hewlett Foundation.
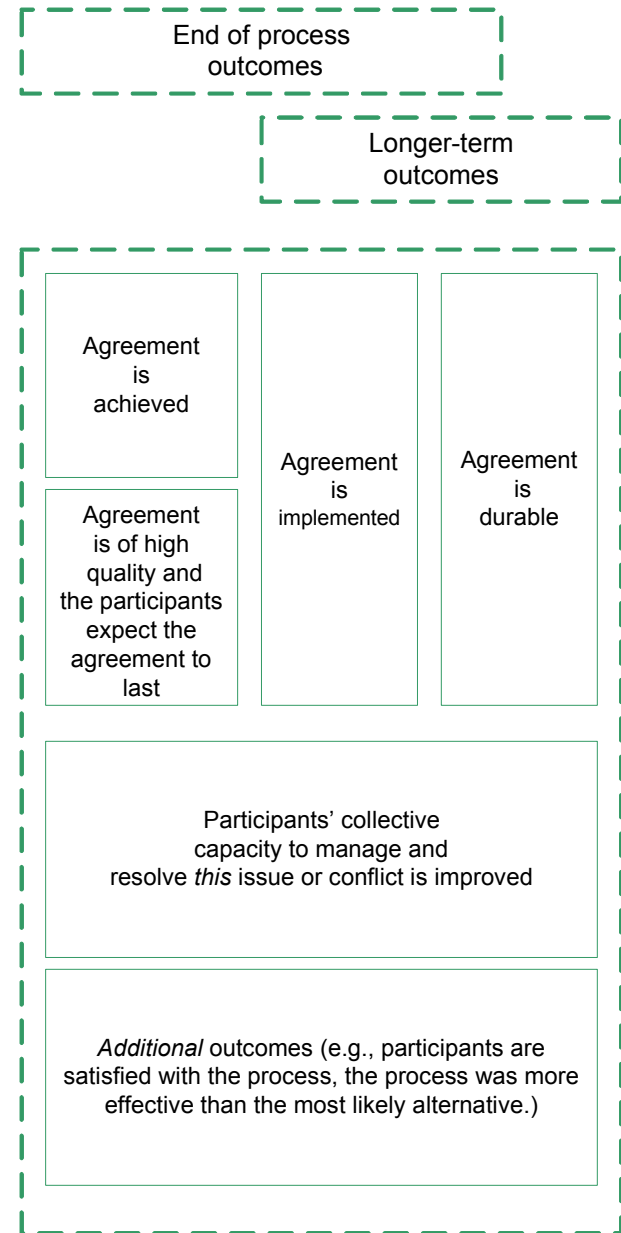
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Desired Conditions and Expected Process Dynamics

Desired conditions → Expected process dynamics

Mediator/facilitator skills and practices add value

Collaborative problem solving/ dispute resolution is determined to be appropriate

Appropriate *participants* are involved in the process

Appropriate *mediator/facilitator* engaged to guide the process

Participants are *effectively* engaged (i.e. participants communicate and collaborate)

Participants understand each other's *views* and *perspectives*

Participants' understanding of *issues* improves (e.g. technical issues, etc.)

Participants narrow and clarify the issues in dispute

Alternative forums are identified for issues that are better dealt with in other forums

Participants have the capacity to engage in the process

Relevant, high quality and trusted information is effectively incorporated into the process

End of Process and Longer-term Outcomes

Note: The term "Agreement" applies to written or unwritten agreement reached by participants in the process, including plans, proposals/recommendations, procedures, or collaborative decisions to work together and settlements.

End of process outcomes

Longer-term outcomes

Agreement is achieved

Agreement is of high quality and the participants expect the agreement to last

Agreement is implemented

Agreement is durable

Participants' collective capacity to manage and resolve *this* issue or conflict is improved

Additional outcomes (e.g., participants are satisfied with the process, the process was more effective than the most likely alternative.)

Additional Outcomes:
Secondary Elements

Satisfaction

- Participants are satisfied with the process used.
- Participants are satisfied with the results of the process.

Participants Endorse Collaborative Processes

- Participants would use this type of process again in similar situations.
- Participants would recommend this type of process to others without hesitation.
- Participants would not have progressed as far using any other process.

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Additional Outcomes (*Continued*)

Effectiveness _compared_ to the most likely alternative if the participants had not participated in the collaborative process

- The results of the collaborative process better served the interests of the participants.

- The collaborative process we participated in more effectively addressed the issues or resolved the conflict.

- The results of the collaborative process are less likely to be challenged.

- The participants are more likely to be able to work together in the future on matters related to this case or project.

Additional Outcomes (*Continued*)

Cost Efficiency _Compared_ to the Most Likely Alternative

- The process took less time, or _even_ if it took more time, the extra time was worth the investment.

- The process was less expensive, or _even_ if the process was more expensive, the extra costs were worth the investment.

- The benefits of the process will outweigh the costs.

Benefits Outweigh the Costs

- The benefits of the process will outweigh the costs.

Impacts

What **long-term outcomes** do you anticipate as a result of the agreement or lack of agreement?

What are the top 3 things that, over time, you would need to see happen as **evidence that this process was successful?**

In very general terms, **what did this collaborative process accomplish**? (A crisis averted, conflict didn't escalate, nothing was accomplished, etc.).

Impacts

For example:

Beneficial environmental, economic, community/ social, and institutional impacts occur

Impacts contribute to more effective problem solving, conflict management and governance

Contextual Information (Variables)

Contextual information is collected about each case. Examples include:

- *Type of collaborative process*
- *Number of sessions*
- *Number of participants*
- *Category of participants*
- *Type of issues*
- *Participants willingness to collaborate at the beginning of the process*
- *Extent to which an assessment was conducted*

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Timing of the Evaluation:

Evaluations are conducted:

- at the end of a process (e.g., the process participants have stopped deliberating whether or not they have reached agreement), and

- six months after the end of the process.

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Rating Scale

Rating Scale

0	1	2	3	4	5	6	7	8	9	10
Not at all					Moderately					Completely

Evaluation Products: Project Level Report

Participants understand each other's views and perspectives	Summary Analysis			
	No. of responses	Median	Mean (SD)	*Level of Achievement*
The extent to which the process helped you gain a better understanding of each other's views and perspectives. (Q12e)	9	10.00	9.11 (1.36)	High
The extent to which other participants understood your views well enough that they could state them accurately. (Q12f)	7	9.00	8.43 (1.27)	High

To help the reader interpret the findings, the mean ratings are collapsed into four categories of achievement:

Levels of Achievement	"Low"	"Low to Moderate"	"Moderate to High"	"High"
	0.00 to 2.50	2.51 to 5.00	5.01 to 7.50	7.51 to 10.00

The levels of achievement are suggested interpretations; we strongly encourage the reader to draw their own conclusions based on the data provided.

Analytic Methods: Dual Purpose

Use descriptive statistics, to present quantitative and qualitative data in a concise and revealing format.

Use statistical models, to test relationships among variables of interest

Evaluation Products and Audiences

	Case Reports	Agency Reports	Multi-Agency Reports
Process Participants	✓		
Mediators/Facilitators	✓		✓
Project Managers and Program Administrators	✓	✓	✓
Funding Agencies (Office of Management & Budget, etc.)		✓	✓
Prospective Users/Trainers/ Policy Makers, etc.	✓	✓	✓

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Questions

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Preliminary Findings from Phase I of the Multi-Agency Evaluation Study.

Acknowledgements

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The Dataset

Case (n=24) Respondents (n=191)		
Variable	**Mean (sd)**	**Range**
Number of participants per case	12.6 (10.4)	2 - 43
Number of neutrals per case	-	1 - 3
Number of sessions held by neutral	15.4 (16.1)	1 - 56
Difficulty of developing & implementing effective collaborative process (0 = "easy" to 10 ="impossible")	7.3 (1.7)	3 - 10

Dataset Contributors

Conflict Prevention and Resolution Center, U.S. Environmental Protection Agency

Federal Energy Regulatory Commission

Florida Conflict Resolution Consortium

Office of Collaborative Action and Dispute Resolution, U.S. Department of the Interior

Oregon Dispute Resolution Commission

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Agreement Status (n=24)

Agreement Reached
(whether partial or full)
87%

No Agreement
13%

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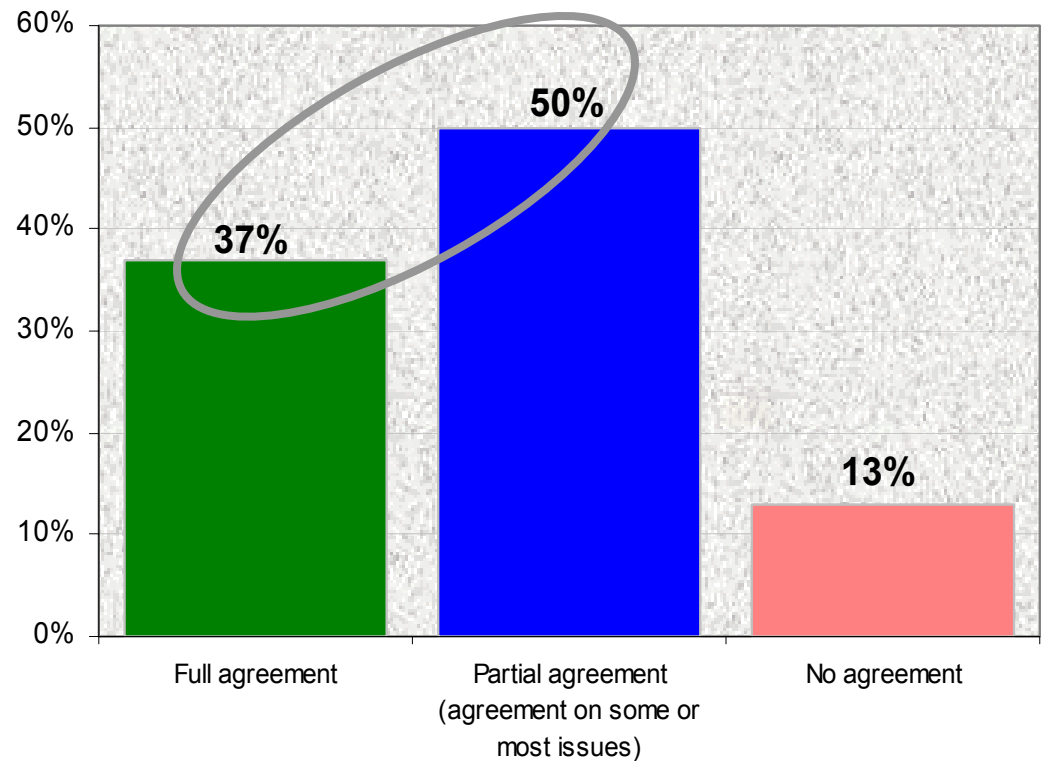
Defining "Agreement"

The term "Agreement" applies to collaborative decisions in the form of plans, proposals, recommendations, or signed formal agreements resolving a dispute.

Ambiguity on a Case Level: Agreement Reached or Not?

In quite a number of cases, the majority of respondents indicated that agreement was reached *while* other respondents indicated they were continuing to work on differences, had given up or were going to court.

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Type of Cases Included in the Multi-Agency Dataset

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Where Does the Ambiguity Come From?

Open-ended responses from participants:

"One party was not fully committed or engaged in the process, signed the agreement then a *month* later withdrew the signature."

"At the end, one organization did not buy-off on the proposed plan. They eventually filed a lawsuit which is still in progress. I feel the facilitated meetings were extremely successful because several groups were able to find the common ground. This in a major way was due to the neutral's style and expertise. We continue to use the neutral as we move through another process which is closely tied to the facilitated meetings and the lawsuit."

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Agreements and Related Evaluation Challenges:

- Overcoming the limitations of end-of-process evaluations to understand more about the **impacts of the agreements reached** (e.g., are the agreements implemented, do they last).

- Effectively evaluating **ECR not only as an alternative** but when it works in tandem with other processes (e.g. litigation).

- Understanding more about the performance of the **different types of ECR** (e.g. upstream and downstream processes).

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ECR helps participants reach agreements that are implementable

In 89% of cases, the respondents reported that **responsibilities and roles were defined** to guide the implementation of agreements on resolved issues.

In 91% of cases, the participants feel that the **agreements reached can be implemented**.

In 72% of cases, the participants *expect* the **agreement to be <u>fully</u> implemented**.

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The Rating Scale

Disagreement					Agreement				
0	1	2	3	4	5	6	7	8	9	10
Totally Disagree										Totally Agree
"Low" less than 5.00					"Medium" 5.01 - 7.50			"High" 7.51 - 10.00		

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Agreements: A Closer Look

■ **High: Percent of ratings between 7.51 and 10.00**

■ **Medium: Percent of ratings between 5.01 and 7.50**

□ **Low: Percent of ratings between 0.00 and 5.00**

	Participants feel the agreement can be implemented.	Agreement includes responsibilities and roles for implementation.	Participants built strong enough relationships with each other to ensure that the agreement will last.	The agreement has sufficient flexibility to sustain future changes.
High	48%	42%	20%	42%
Medium	43%	47%	40%	37%
Low	9%	11%	40%	21%
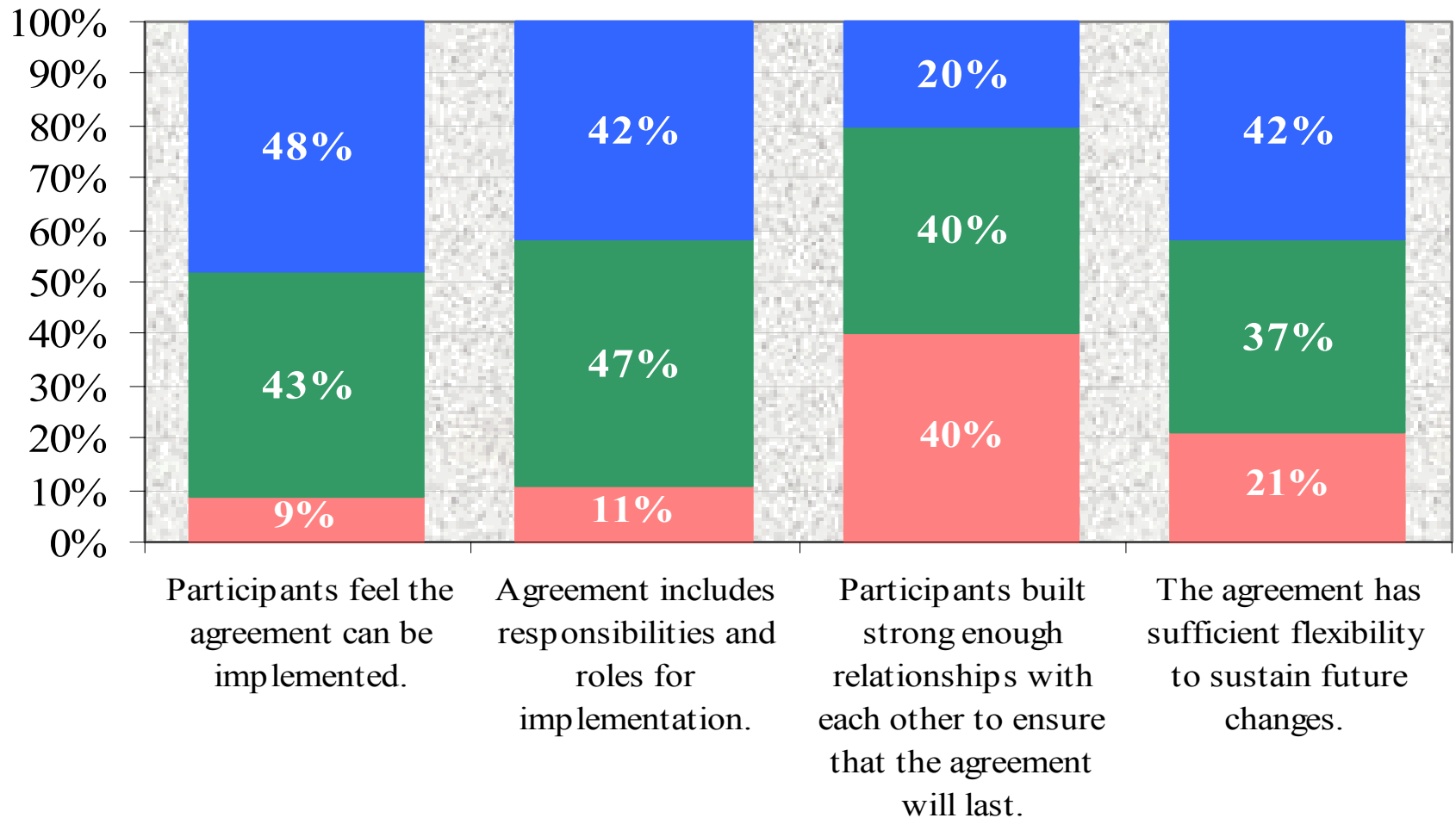
Improved Capacity to Manage and Resolve Conflict

In *just over half of the cases* evaluated, the respondents reported that:

(a) they can now **meet** with all of the other participants to discuss issues of concern (60%),

(b) it is now easier to **discuss** controversial issues with other participants (61%), and

(c) they can now **work** productively with other participants with whom they have disagreements (64%).

ECR Enhances Participants' Understanding of Core Issues

In 91% of cases, respondents reported that they had **identified the key differences** that needed to be addressed, in order for the controversies to be resolved.

In 90% of cases, the respondents reported that the process helped them **understand the core of their disagreements** with the other participants.

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Mediator/Facilitator Skills and Practices

Legend:
- **High: Percent of ratings between 7.51 and 10.00** (blue)
- **Medium: Percent of ratings between 5.01 and 7.50** (green)
- **Low: Percent of ratings between 0.00 and 5.00** (pink)

Category	Low	Medium	High
Understood the issues being discussed	9%	50%	41%
Understood our concerns		32%	68%
Made sure that the concerns of all participants were heard	5%	18%	77%
Made sure the concerns of all participants were addressed	4%	25%	71%
Helped us manage our time well	4%	29%	67%
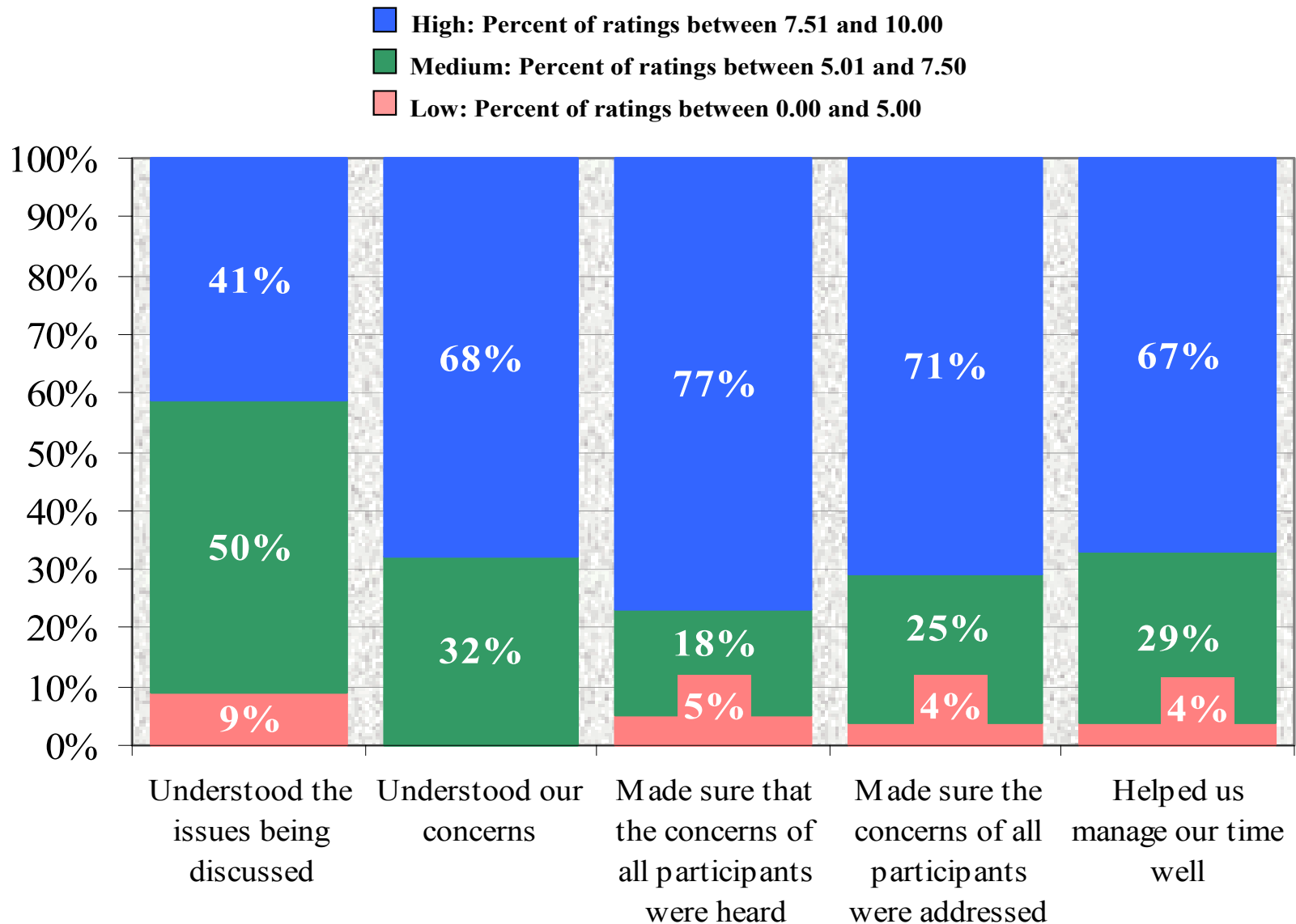
Mediator/Facilitator Skills and Practices (continued)

■ High: Percent of ratings between 7.51 and 10.00
■ Medium: Percent of ratings between 5.01 and 7.50
■ Low: Percent of ratings between 0.00 and 5.00

	Made sure that we all had a roadmap of where we were going with the process	Ensured that all participants were fully engaged in the process	At no time did one of the parties dominate to the detriment of the process or others	When things got tense the neutral was always able to help us find ways to move ahead constructively	The participants would be happy to work with the same neutral again
High	58%	58%	27%	67%	78%
Medium	29%	33%	41%	25%	18%
Low	13%	9%	32%	8%	4%
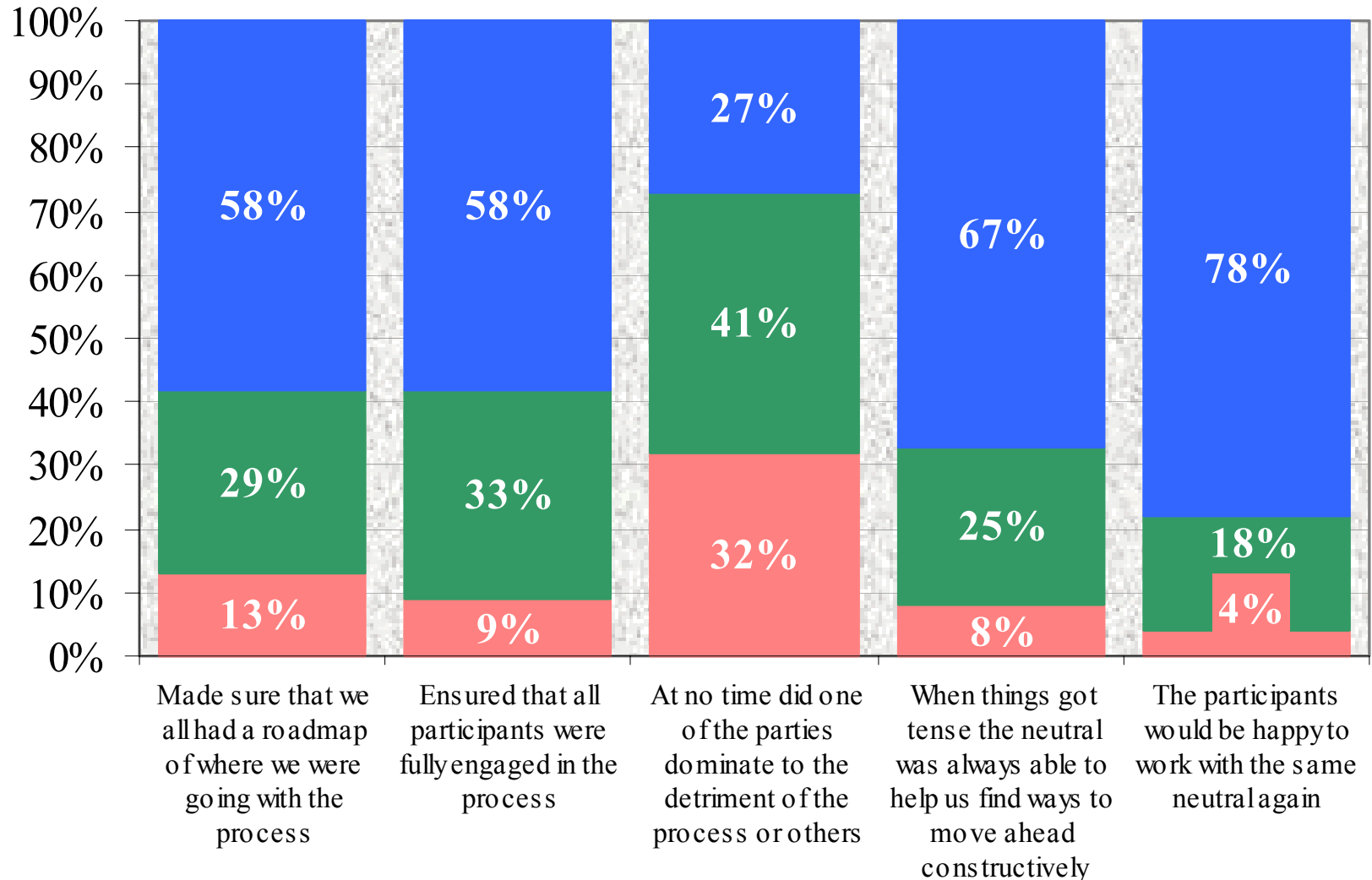
Respondents' expressions of appreciation for the Mediators/Facilitators

"Mediator's skills and high standards were key to achieving an outcome for this horribly difficult dispute. I cannot praise the mediator highly enough. I am in awe of the mediator's ability to get to the heart of the issue, to help the participants see where they could find a common interest and a solution, and to deal with some truly difficult people (including those on our side)."

"Mediator did a great job. The mediator earned combat pay."

"I think the process was extremely successful, which was made possible by three factors: an agency that was amenable to the process; skilled facilitation; general amicability and shared values among the parties."

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Question Asked of Mediators/Facilitators

Reflecting on the controversy, are there lessons that should be recorded?
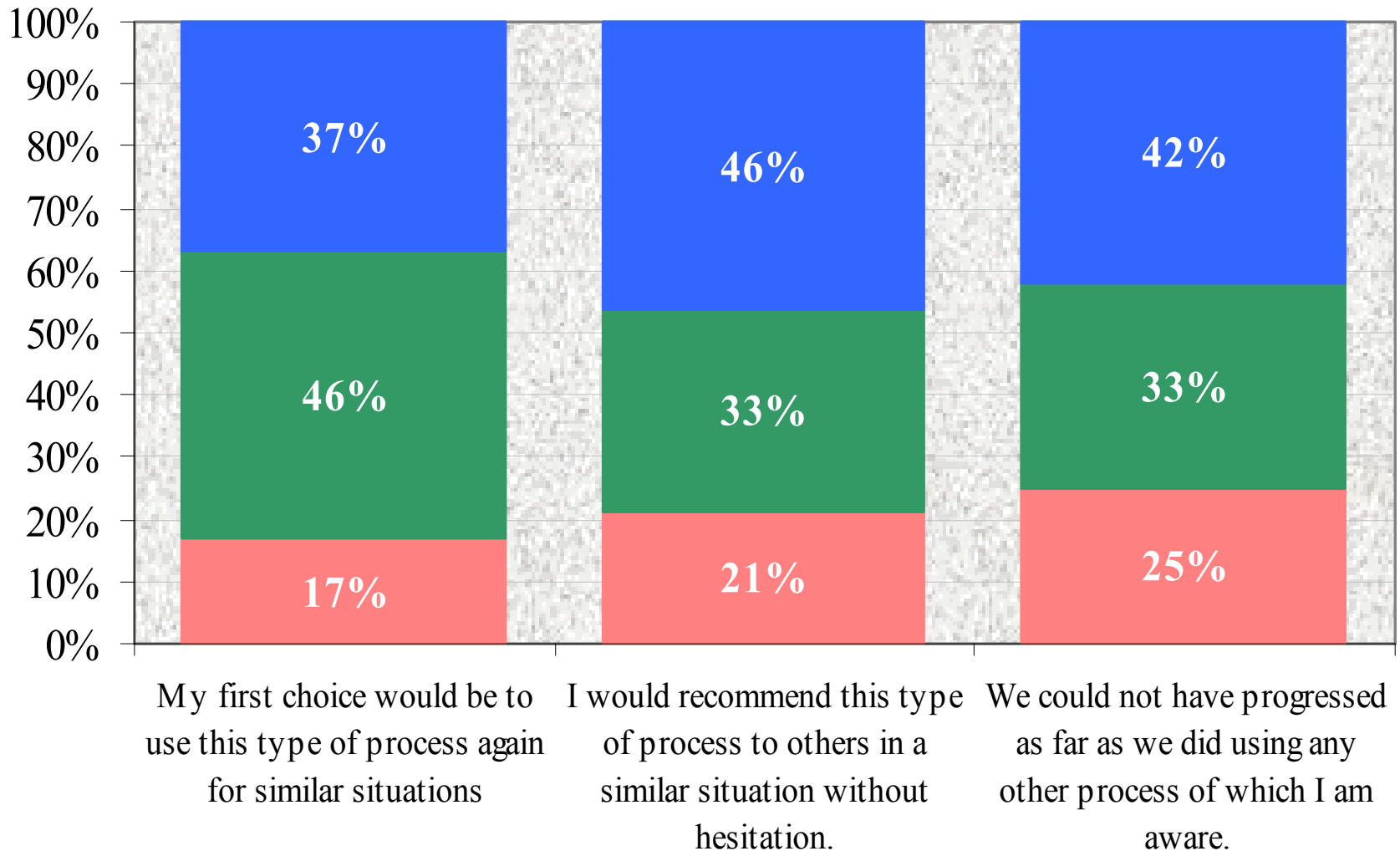
Lessons Learned:

"Work is easily unraveled when resources, and neutrals go away. Building in some sustainability for the groups/participants should be an important consideration when designing processes."

Related participant feedback:

- In 50% of cases, the respondents indicated they **no longer need** the assistance of a third party to resolve significant problems with the other parties who participated in the process.

- In 60% of cases, the respondents feel they had built strong enough **relationships** with each other to ensure the agreement will last.

- In 61% of cases, the respondents feel it is now **easier to discuss** controversial issues with other participants.

- In 64% of cases, the respondents feel they can now **work more productively** with other participants with whom they have disagreements.

- In 91% of cases, the respondents feel the agreements reached can be implemented, however, in **somewhat fewer cases** (72%), the respondents **expect** the agreements to be *fully* implemented.

Respondents' Ratings of the Value of ECR

■ **High: Percent of ratings between 7.51 and 10.00**

■ **Medium: Percent of ratings between 5.01 and 7.50**

■ **Low: Percent of ratings between 0.00 and 5.00**

	My first choice would be to use this type of process again for similar situations	I would recommend this type of process to others in a similar situation without hesitation.	We could not have progressed as far as we did using any other process of which I am aware.
High	37%	46%	42%
Medium	46%	33%	33%
Low	17%	21%	25%

Open-ended Questions

- Respondents' identification of **challenges and criticism** of the processes.

- Respondents' expressions of appreciation and identification of **strengths of the processes.**

- Respondents' recommendations on how to **improve** ECR processes.

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Challenges and Criticism

"This process was quite successful in getting concurrence on the problem or problems and the best path forward to find needed solutions. Sadly, as in so many cases, **funding** continues to be a problem. This process was invaluable to getting us to this point. Thank you."

"The selection of participants must assure that there is a **balance of representation**. One side should not need to feel 'outgunned' by the other side due to an imbalance of roles."

"Withheld **information** is always a problem with government parties. However, with the neutral's assistance the information was more forthcoming."

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Additional Benefits to Participating in ECR Processes

"**Litigation (time and cost savings)** avoided, precedence of law penalty published, avoided embarrassment to the federal agency…federal agency has changed policy to prevent reoccurrence."

"**Becoming part of the solution** instead of viewed as adding to the problems."

"Compared to the **previous adversarial relationships** between residents, loggers, and environmentalists, this program went smooth and was excellent."

Encouraging Preliminary Findings

ECR processes are viewed by participants as effective in helping resolve environmental disputes.

In 87% of cases, full or partial agreement was reached. In 75% of cases, the respondents reported they "could not have progressed as far" using any other process.

ECR helps participants reach agreements that are implementable.

In 89% of cases, the respondents reported that responsibilities and roles were defined to guide the implementation of agreements on resolved issues. In 91% of cases, the participants reported that the agreements reached can be implemented.

ECR enhances participants' understanding of core issues.

In 90% of cases, the respondents reported that the process helped them understand the core of their disagreements with the other participants. In 91% of cases, respondents reported that they had identified the key differences that needed to be addressed, in order for the controversies to be resolved.

Encouraging Preliminary Findings (*Continued*)

Professional facilitators are viewed as a critical factor in ECR success.

In 95% of cases, the respondents felt the mediator or facilitator made sure their concerns were heard and addressed.

Respondents endorse ECR.

In 79% of cases, respondents would "without hesitation" recommend an ECR process to others in a similar situation.
In 83% of cases, the respondents indicated their "first choice" would be to use ECR processes again for similar situations.

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Comparing this study's findings with other available research

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Agreement Rates

**Environmental Conflict Resolution
Agreement Rates - Evidence from the Field**

Evidence from the Field	Percent (%) of agreements reached
Multi-Agency Study, 2004	87%
Frame, Gunton and Day, 2004	93%
Berry, Stiftel and Dedekorkut, 2003	89%
O'Leary and Husar, 2002	61%
Andrew, 2001	81%
Sipe, 1998	85%
Sipe and Stiftel, 1995	74%
Bingham, 1986	78%

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Participants' Endorsement of ECR

Participants' Endorsement of ECR

Evidence from the Field		
Multi-Agency Evaluation Study	First choice to use ECR again	83%
Multi-Agency Evaluation Study	Recommend ECR without hesitation	79%
Frame, Gunton and Day, 2004	Would get involved in ECR again	75%
Consensus Building Institute et al., 2003	Would use ECR again in similar situations	87%
Berry, Stiftel and Dedekorkut, 2003	Support increased use of ECR	80%
O'Leary and Husar, 2002	Would recommend ECR to clients	79%

Percent (%) respondent endorsement of ECR

Questions

For more information visit the U.S. Institute website at:

www.ecr.gov